

THE EARLIER STAGES OF CERATOMIA AMYNTOR.

BY WILLIAM BEUTENMÜLLER.

Stage I.—Body pale green, with a whitish dorsal line and one on each side on the subdorsal, the oblique stripes along the sides running through the subdorsal line and almost touching the stripe on the dorsum. Caudal horn yellowish with two fine fork-like setæ at the tip. On each the second and third segments are two short, blunt, stout tubercles. Thoracic feet and abdominal legs green. Length, 8.50 mm. Getting ready to moult July 13. Moulded July 14th.

Stage II.—Same color as in previous stage. Body and head, granulated, and the line along the dorsum in form of serrations. The tubercles on the second and third segments more prominent. The body is regularly wrinkled and the granulations are placed on these transversely. Length, 15 mm. Moulded July 18th.

Stage III.—Uniform green above and below. The dorsal line is now composed of rather prominent elevated serrations and at the anterior edge of the first segment a transverse row of serrations. The oblique stripes along the side almost touch the dorsal line. Caudal horn yellow. The tubercles on the second and third segments yellow and beset with small yellow protuberances. There is also a serrated, yellow, subdorsal line, beginning at the anterior edge of the first segment and running to the end of the fourth segment; it is broken by the tubercles. Length, 21 mm. Moulded July 22d.

Stage IV.—Head green with a yellow line on each side and covered with yellow, granular dots. Thoracic feet yellow, tip red. The tubercles on the second and third segment are now fleshy and very prominent with canary yellow protuberances. The row of serrations on the anterior edge of the first segment is now also very prominent. The subdorsal line as in the previous stage. The dorsal line prominent and distinctly serrated, pinkish, white. The seven pinkish white oblique stripes along the sides, raised by tubercular dots. Caudal horn yellowish. Anal plates with yellow borders. Body wholly dotted with whitish granular dots. Length, 25 mm. Moulded July 27th.

Stage V.—Same color and marking as in the preceding stage, except the thoracic feet, pink. Length, 45 mm. Moulded July 31st and August 1st.

Stage VI.—Chocolate brown with the dorsal serrations and lateral oblique stripes somewhat paler. The lateral stripes are now composed of elevated serrations ; behind each stripe is a pale brownish-gray hue or shade. Subdorsal serrated line somewhat like in the last stage, but more prominent. The four fleshy tubercles with yellow warts. Anal-plate maroon brown. Head chestnut brown, granulate, with a paler stripe on each side. Mouth-parts yellow ; mandibles black. Thoracic feet chestnut red.

Food-plant : Elm.

As is well known the usual color of the fully grown larva is green instead of brown and the species also feeds on linden and white birch.

THE EARLIER STAGES OF SMERINTHUS GEMINATUS.

BY WILLIAM BEUTENMÜLLER.

Stage I.—Wholly green. Caudal horn black. Head globular. Length, 4 mm. Moulded June 5th.

Stage II.—The head is now triangular and slightly furcate on the vertex and covered with minute granulations. Along the sides of the body are seven oblique yellow bands, broken on the subdorsum by a longitudinal, narrow yellow line. The bands and lines are composed of elevated granulations. Over the body are numerous elevated granulations. Caudal horn reddish brown. Tip of thoracic feet pinkish. Length, 7.5 mm. Moulded June 9th.

Stage III.—Very much like the last stage, but the oblique lateral stripes are paler and the subdorsal stripes more conspicuous on the first to the end of the fourth segments. Length, 12 mm. Moulded June 11th.

Stage IV.—Pale green with the subdorsal line only reaching to the end of the fourth segment and composed of serrations, and much deeper yellow. The body is covered with whitish green granules, giving the larva a light appearance. The last oblique stripe on the sides reaches to the tip of the caudal horn, which is black above. Head triangular. Spiracles black. Thoracic feet black, pinkish at the base. Length, 15 mm. Moulded June 16th.